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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,980	05/20/2002	Paul A. J. Morris	65008-034	1133
7590	01/09/2006		EXAMINER	
Harold W Milton Jr Howard and Howard Attorneys The Pinehurst Office Center Suite 101 39400 Woodward Avenue Bloomfield Hills, MI 48304			FISCHER, JUSTIN R	
			ART UNIT	PAPER NUMBER
			1733	
DATE MAILED: 01/09/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/031,980	MORRIS, PAUL A. J.	
	Examiner Justin R. Fischer	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 14 October 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,4-10 and 13-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,4-10 and 13-15 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In these claims, the language "a stretch waistband fabric) and "the stretch fabric" are used. It is unclear if these terms are being used to describe the woven fabric or the waistband assembly as a whole (woven fabric and thermoplastic interlining).

Additionally, regarding claim 9, the original disclosure teaches a method in which "the waistband fabric" is pre-tensioned prior to compressive shrinking. The claim, on the other hand, identifies "the stretch fabric" as being tensioned during processing with the interlining. It is unclear if the term "interlining" in claim 9 is being used to refer to the additional layer described in claim 8 or if it is being used to describe the thermoplastic interlining described in claim 1 (that defines waistband assembly).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claim 15 is rejected under 35 U.S.C. 102(b) as being anticipated by Constantine (US 3,655,474, newly cited). Constantine teaches a method of forming a stretchable composite fabric comprising passing a shell fabric (woven fabric strip) and a backing fabric (interlining) through a fabric treatment apparatus (depicted in Figure 1), applying a compressive shrinkage thereto, and bonding the respective fabrics to one another. The reference further teaches that (a) the composite fabric (combination of shell and backing fabric) can be initially exposed to steam prior to being fed through the fabric treatment apparatus and (b) the retarding roller of the fabric treatment apparatus can be internally heated (Column 3, Lines 30-50, Column 8, Lines 10-23, Column 11, Lines 10-20).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Constantine. As noted above, Constantine substantially teaches the method of the claimed invention, including the steps of applying heat and pressure to a shell fabric or woven fabric, simultaneously compressing a thermoplastic interlining or backing fabric, and bonding the fabrics to one another. In this instance, the respective fabrics are contacted and passed through a fabric treatment apparatus to introduce a compressive shrinking in each fabric. In regards to the bonding, Constantine discloses multiple bonding techniques, including bonding after compressive shrinking and suggests that

any of these techniques is suitable (Column 4, Lines 36-54, Column 5, Lines 10-18, and Column 11, Lines 10-20). Constantine further suggests that such a fabric, which has a degree of elastic restorability, is usable in the garment industry (Column 1, Lines 5-10 and Column 11, Lines 10-20)- while the reference fails to expressly teach the manufacture of a waistband, one of ordinary skill in the art at the time of the invention would have found it obvious to form a waistband using the method of Constantine in view of the disclosure noted above (waistbands are well recognized as being a garment component). It is additionally noted that such composite fabrics are recognized as being used in the manufacture of waistbands. Lastly, as noted above, Constantine teaches that the fabric has some degree of elastic restorability, which may be desirable for many end uses.

7. Claims 4-7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Constantine as applied in claims 1 and 10 above and further in view of Bauer (US 3,723,217, newly cited). As noted above, Constantine substantially teaches the method of the claimed invention, include adhesively bonding the respective fabrics. While the adhesive material nor the method of application are disclosed, the claimed material/method are consistent with the conventional adhesive materials and methods used in the manufacture of similar composite fabric assemblies, as shown for example by Bauer (Column 3, Lines 24-40). Absent any conclusive showing of unexpected results, one of ordinary skill in the art at the time of the invention would have found it obvious to practice the method of Constantine with the claimed adhesive material and deposition technique.

Regarding claim 7, Bauer evidences the well-known use of polyamide and polyester materials for the backing layer (Column 2, Lines 67+). Absent any conclusive showing of unexpected results, one of ordinary skill in the art at the time of the invention would have found it obvious to form the backing fabric of Constantine from a woven polyamide or a polyester fabric. It is further noted that nylon and acetate are only exemplary in the disclosure of Constantine (Column 3, Lines 50-55).

8. Claims 1, 4-7, 10, and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer and further in view of Constantine. Bauer discloses a method of forming a bonded textile fabric useful in the manufacture of wearing apparel comprising the steps of arranging an uncured or partially cured adhesive between a first and second fabric, compressively shrinking the assembly by feeding said assembly through a fabric treatment apparatus comprising a plurality of rollers (applies pressure), and curing the adhesive (bonding) while both fabrics are in a compressed state (Column 3). The reference, however, is silent as to the application of heat. Constantine, on the other hand, teaches an extremely similar method and suggests that effective compressive shrinkage is obtained by exposing the assembly to steam and optionally heating the retarding roller (Column 8, Lines 1-20). As such, one of ordinary skill in the art at the time of the invention would have found it obvious to apply heat in the method of Bauer.

As noted above, Bauer teaches that the composite fabric is usable in the apparel industry- while the reference fails to expressly teach the manufacture of a waistband, one of ordinary skill in the art at the time of the invention would have found it obvious to

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form a waistband using the method of Bauer in view of the disclosure noted above (apparel industry- waistbands are well recognized as being apparel/garment components). It is additionally noted that such composite fabrics are recognized as being used in the manufacture of waistbands.

As to the respective fabrics, Bauer teaches that they can be knitted, woven, or non-woven and furthermore, that they may be comprised of cotton, wool, polyamides, polyesters, or blends thereof (Column 3, Lines 1-10). One of ordinary skill in the art at the time of the invention would have found it obvious to form one of the layers as a woven fabric and one of the layers from a thermoplastic material- this combination of materials is consistent with composite fabrics used in the apparel industry. It is further noted that Constantine recognizes the known use of woven fabric layers and thermoplastic interlinings or backing layers.

Regarding claims 4-6, the claimed material/method are consistent with the conventional adhesive materials and methods used in the manufacture of similar composite fabric assemblies (Column 3, Lines 24-40).

With respect to claims 7, 13, and 14, the fabrics can be formed as a woven construction and they can be formed of either polyamide or polyester- one of ordinary skill in the art at the time of the invention would have been able to appropriately selected the desired materials and arrangement depending on the specific article being manufactured.

9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer and Constantine as applied in claim 1 above and further in view of the Admitted Prior

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Art (Page 4). Bauer discloses a composite assembly formed of at least two plies of the same or different textile fabric (Column 2, Lines 60-66). In this instance, the claim requires a non-woven or knitted material be processed with the composite assembly defined by a woven fabric and a thermoplastic interlining. As noted above, one of ordinary skill in the art at the time of the invention would have found it obvious to form the composite assembly from a woven fabric and a thermoplastic layer in view of the disclosure of Bauer and the known use of such combinations to form a composite fabric usable in the apparel industry. In regards to the inclusion of an additional layer, the APA recognizes that such a layer (rigid non-woven or knitted material- stretch interlining) is commonly included in order to make the waistband fabric (fabric and interlining) more substantial and easier to handle. One of ordinary skill in the art at the time of the invention would have found it obvious to form the assembly as a three layer laminate since the reference teaches a construction of at least two plies and the APA recognizes the specific use of such a layer (rigid non-woven or knitted material) with a composite assembly defined by a woven fabric and a thermoplastic interlining for the benefits detailed above. It is additionally noted that Bauer is broadly directed to the use of a composite fabric in the apparel industry and one of ordinary skill in the art at the time of the invention would have found it obvious to use the composite in a wide variety of environments (including stretch trousers and skirt waistbands- instances where stretch interlinings are conventionally included).

10. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer, Constantine, and the APA as applied in claim 8 above and further in view of Kavesh

(US, 4,819,458, of record) and optionally in view of Dagg (GB, 2,307,167, of record).

As noted above, Bauer in view of Constantine disclose a method of laminating a woven fabric to a backing layer or interlining. While Bauer fails to expressly suggest that the woven fabric is tensioned during processing, one of ordinary skill in the art at the time of the invention would have found it obvious to tension said woven fabric since such a technique is extremely well known in the manufacture of clothing articles in order to impart a desired pattern (against direction of shrinkage), as shown for example by Kavesh (Column 1, Lines 37-50 and Column 4, Line 58 – Column 5, Line 20). Dagg is optionally applied to further evidence the well know use of tensioning during bonding of fabric layers in the manufacture of clothing articles (Page 8, 2nd Paragraph). Thus, tensioning is recognized in the clothing industry as a suitable processing technique when dealing with shrinkable fabrics, there being no conclusive showing of unexpected results to establish a criticality for the claimed tensioning.

Response to Arguments

11. Applicant's arguments with respect to claims 1, 4-10, and 13-15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R. Fischer** whose telephone number is (571) 272-1215. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Justin Fischer

January 5, 2006